Gimme Arrays!

Newsletter for the Toronto Local Chapter of the ACM Special Interest Group on APL

Vol. 1 No. 2 October 1993

Next meeting

Date	**Monday, Nov. 1**
Time	**6:30 pm**
Location	**10th Floor Cafeteria (CIBC/Wood Gundy)**
Address	**BCE Place Canada Trust Tower 161 Bay Street**
Speaker	**Chris Burke**
Topic	**Application programming in J**

Chris Burke of Strand Software Systems, Inc., discusses various practical issues that arise when programming J/Windows. His talk will be accompanied by demonstrations and handouts with source code.

Future meetings

1993	**29 November***
1994	**24 January**
	28 February
	28 March
	25 April
	16 May

(* date changed because of the federal election.)

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September Meeting Review

Marc Griffiths

"We're glad we did it; we're glad it's over," was the verdict of **Larry Moore**, APL93 Conference Chair. Like many conferences, this one was hard work. The inevitable hiccups occurred but, overall, the event received a favourable response from the more than 360 people attended, of whom about 320 were delegates.

The various social events - the City Hall reception, the Casa Loma barbecue, the Algonquin Island picnic - went well. The numerous unscheduled evening seminars on fluid dynamics also went smoothly according to various sources.

Ben Best, Conference Treasurer, is confident that APL93 will prove to be a financial success. The Toronto SIGAPL will receive 10 per cent of any profits, which will keep us in cookies for the rest of the year.

see Sept. meeting on page 6

Manugistics Users Conference

Chris Lee

Manugistics, Inc. held its annual User's Conference in Bethesda, Maryland, on September 19th-21st. Most of the sessions were technical presentations from Manugistics' staff covering aspects of using the APL*PLUS II products for DOS/Windows and UNIX.

Ted Perrotte of Rogers, Casey and Associates, Inc. showed an application built using APLGUI, the Windows interface to APL*PLUS II.

James Wheeler, VP for APL*PLUS, gave attendees their first glimpse of the next generation APL (code-named "INCA") and announced plans for releasing a full Windows version of APL*PLUS II during the next few months.

Work for APL*PLUS II/Windows will serve double-duty for INCA. Manugistics wants its APL clients to benefit from its new developments rapidly, and

see Manugistics on page 2

APL93 Videotapes

With financial support from the British APL Association and **Vin Grannell** (Los Angeles City College), **Bob Bernecky** secured the services of **Chris Clifford** to videotape many of the sessions at the APL93 Conference.

The result is some thirty to forty hours of tapes. These include the panel and plenary sessions, most of the tutorials, and some of the papers.

From the Toronto SIG, Bob and **Eric Granz** have taken on the roles of Siskel and Ebert, reviewing the tapes for quality of recording

see APL93 Videotapes on page 2

Manugistics *continued from page 1*

doesn't want them to wait for all the array-oriented programming publicity needed to introduce INCA to a non-APL audience.

Two luncheon speakers rounded out the conference. **Dr. Ben Shneiderman**, Human Computer Interaction guru from the University of Maryland, gave a lively presentation on keyboard-less interactive database querying techniques. **Shane Chalke**, president and founder of Chalke Inc., explained how APL*PLUS has been (and continues to be) the key to building an industry-leading software company in the highly competitive actuarial field.

After the conference was a 3-day class on APLGUI and APLDDE. It attracted almost a third of the conference attendees.

APL93 Videotapes *continued from page 1*

and content. At the conclusion of this review exercise, they will prepare a list of titles which would be of interest to individuals or APL SIGs (either to show for part of a meeting or to lend to members) or which have some educational value.

The BAA has generously offered to pay up to 50% of the post-production costs, and we are currently looking for other sponsors willing to share these costs. If you - or your local APL special interest group - would like to support this effort, or are interested in obtaining copies of tapes of any sessions, please contact one of the Toronto SIGAPL officers (see shaded area on this page).

We hope to make the tapes available to the whole APL community.

Gimme Arrays!

Production

Gimme Arrays is produced on an Intel-486 based personal computer using Microsoft Publisher running under Windows 3.1 and printed using a PostScript printer.

Submitting Articles

The editorial staff encourages everyone to submit articles for publication. We prefer to receive the copy in electronic form via e-mail to the editor or on either a 5.25 inch or 3.5 inch floppy disk. Hard copy or floppy disk may be given to the editor at any of the meetings or sent to the Toronto ACM SIGAPL address. We reserve the right to edit copy. Deadline for submissions is the meeting each month.

Copyright

Previously copyrighted text must be accompanied by a copyright notice and publication permission from the copyright holder. Other publications may reprint articles provided that the Toronto chapter of the ACM SIGAPL and the author are both acknowledged.

Advertising

Advertising rates are $50 for a quarter page per issue, pro rata for part-page ads. Please contact the editor.

Toronto Special Interest Group on APL

Meetings

Start at 6:30 and are generally held on the fourth Monday of the month, from September to November and January to May.

Location

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Corporate Sponsorship

for SIG meetings is welcome, and a donation of $250 per meeting is recommended. This sum includes advertising in the newsletter as well as promotion in selected newspapers and at the meeting.

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Around the World: British APL Association

Diane Whitehouse

The **British APL Association (BAA)** is a specialist group of the British Computer Society. The group is a large one, with over 1,000 individual, corporate, and sustaining members. About half of these members are based in Britain, the other half are abroad. The BAA holds regular meetings on the third Friday of each month. Since 1991, meetings have taken place at the London headquarters of the Institute for Electrical Engineers. Recent events have featured an ISO progress report, a vendor forum, a field trip to bankers Morgan Stanley, and a session on neural networks.

According to BAA's returning Chair, **David Eastwood**, APL86, organized by the BAA and held in Manchester, made the society a substantial profit. As a result of its healthy bank balance, the society plows its money back into the APL community. It supports a wide variety of projects. I-APL - and its translation into Russian - is one of these. A public domain software library is currently under development. In 1993, the association donated over £1,000 ($Can 2,000) to the APL Russian Fund to enable Russian delegates to attend APL93. Each year, it hosts an outstanding achievement award. This past year, the recipient was **Roger Hui**, for his work on the implementation of J.

According to Eastwood, one of the highlights of the 1993/94 year will be an all-day GUI workshop. Five parallel workshop streams will feature speakers from APL software houses. Examples from real-life working systems will also be demonstrated.

The BAA's other main ventures in 1994 will include its support for **APL in Business** and the launch of *APL Review*, a new academic refereed journal.

The BAA is helping to sponsor the 1994 European Business

see BAA on page 5

The Russian Fund

from comments by Ben Best

"Bob. This is **Pavel Luksha**. We are in Toronto. We are lost." This was the message that greeted **Bob Bernecky** on his telephone answering machine. While members of the Toronto SIGAPL were dutifully awaiting the Russian APL93 delegation at Lester Pearson airport, the Russians were waiting at the Toronto Islands. Despite this inauspicious start, Toronto's Russian guests and their hosts appeared to enjoy their stay.

Over $10,000 was raised for the APL93 Russian Fund. Seven Russian and one Kazakhstani visitor were sponsored to attend APL93. A further two Russian delegates paid their own way but were billeted in local Toronto households. The **Bolin** family, for example, said how much they enjoyed their Russian visitors' stay.

Ben hopes the Russian Fund it will continue in future years. Meanwhile, a number of the overseas visitors to APL93 reported their financial difficulties and appealed for supporting funds.

APL93 Birds-of-a-feather Session: Green visors

*Here's the review of the APL93 editors' BOF we promised in the last newsletter, and edited out at the last minute. Our thanks to **Curtis Jones** of the APL Bay User Group (BUG) for his minutes. They served as a basis for this article.*

What is the circulation of a successful APL newsletter? The New York SIGAPL, the South West Texas, and the Toronto APL newsletters each circulate 2-300 copies. In Southern California's sunnier climes, some 40 copies are sent out. *Vector* (the British APL Association's quarterly journal) and *QuoteQuad* (from the ACM SIG APL) are in a bigger league; they have around one thousand subscribers each. In Washington DC - where even the President has an e-mail address - the APL "newsletter" is transmitted over the wires. **Dick Holt** from Virginia - who set up an APL bulletin board service eight months ago - has had over 3000 calls from 500 people; his service has up to 60 paid subscribers.

see Green visors on page 5

APL Toolkits: Practical Information from the APL93 BOF Session

Richard Levine

In September's newsletter and at last month's APL SIG meeting, I outlined the discussion at the APL93 birds-of-a-feather session on APL toolkits.

Here is the brainstormed listing of the APL tools considered most useful by APL93 attendees. This is an unranked list. Presence on it does not imply endorsement. Nor is a lack of citation intended as a criticism. For further discussion about APL Toolkits, contact me, **Richard Levine**.

* APL-PLUS - FNREPL - string search and replacement functions
* Any workspace browsing function
* Any string search and replacement function for other functions
* Data browsing functions
* IBM VSAPL - XREF - function cross-referencing, browsing, string search and replacement
* IBM VSAPL - APAT - APL Performance Analysis Tools - timing, performance bottleneck analysis
* FINNAPL Idiom List - 2nd edition
* Program development tools from Interprocess Systems (a third-party software vendor)
* APL-PLUS - ASMFNS workspace (fast versions of common functions like string search)
* I-APL - the list of sources that comes with the system (NB. This could not be identified precisely)
* UNIX tools for APL work
* MAC font editor
* Useful non-APL programs linked to APL like text editors, spreadsheets, and graphics packages
* Functions for APL-ASCII transliteration (for e-mail use)
* Communication tools for APL systems
* APL-PLUS screen interface design - vendor supplied workspace provided by Gary Berquist
* FINUTIL - utility workspace. Source: Finnish APL Association (also APL BBS, see below)
* An "ask" function - simple prompting functions for simple workspaces
* APL2 - the IDIOMS workspace
* A function to remove comments from other functions
* Sharp APL - LOGOS system - code maintenance and version control, uses function files
* Toronto Toolkit - large collection of ISO APL standard "utilities". Source: Toronto APL SIG

Among the distribution channels for toolkits were cited vendors of APL systems, third parties such as consultants advising on or providing APL software, various APL publications, and APL special interest groups. The APL BOF session particularly identified the following as useful sources of information on APL tools:

* ***APL - A Design Handbook for Commercial Systems*** by Adrian Smith. This is currently out of print but Adrian has plans to publish a second edition soon.
* ***APL Advanced Techniques and Utilities*** by Gary Berquist.
* Manugistics Bulletin Board Service (BBS)
* The APL BBS, a service run by US-based, Dick Holt. Contact: (703) 528-7617.
* Various APL discussion groups on electronic mail services like CompuServe.

Birds of a feather gather at the APL93 Cosmopolis picnic.

BAA *continued from page 3*

Management School APL in Business conference. Intended to appeal to the business community, the conference organizers want to provide improved conference value for companies and vendors selling APL-based products. They also plan for any profit to continue to strengthen the APL activities that the BAA currently underwrites.

Many British APL Association members - particularly those from overseas - join the association not to attend meetings but to receive *Vector*, its professionally typeset quarterly journal. A compact journal, with over 140 pages per issue, *Vector* contains a number of regular features. There is an APL Product Guide (covering APL systems, interpreters, packages, consultancies, books, and interfaces), news and correspondence pages, meeting reviews, general and technical articles, and reviews of APL products. News from sustaining BAA members, such as Kestrel Consulting, Manugistics Inc., and MicroAPL Limited, is published regularly. The journal is also proud of its wide range of advertisers - amongst them, Cybex, Dyadic Systems Limited, Lingo Allegro Inc., and Soliton Associates Limited.

Vector now plans a fifth annual issue, starting in 1994. *APL Review* will be an academic journal on APL and its applications. It will be edited by **Dr. Alan Mayer** of the University of Swansea, South Wales. Mayer is already editor of *Education Vector*, a special section of the magazine, mailed to over 2,000 subscribers. *Education Vector* is aimed at teachers in secondary and tertiary education who use - or who want to use - APL in their teaching.

For readers interested in learning more about the BAA or subscribing to *Vector*, overseas individual memberships are available for the annual fee of £28.00 (including airmail). Details can be obtained from the British APL Association, c/o Rowena Small, 8 Cardigan Road, London E3 5HU, England. Tel: 011-44 (81) 980-7870.

"I think there is a world market for about five computers."

Thomas J Watson
Chairman of the Board, IBM [1943]

(acknowledgements to *The Economist* magazine.)

Green visors *continued from page 3*

Publishing newsletters - monthly or quarterly - can quickly lead to burnout for their volunteer editors. Editorial teams can be an important way of avoiding this. According to New York's **Jacob Brickman**, the job of editor and publisher is divided into two separate tasks. In *Vector*'s case, **Anthony Camacho** is the editor for 1993 while **Adrian Smith** wears the production editor's hat. In south west Texas, **Stuart Yarus** solicits contributions from many different authors.

What is the status of copyright? How do *QuoteQuad* and *Vector* handle materials published elsewhere? How should local newsletter editors treat materials first published in these two journals? What kind of overlap is there among the ten or more APL newsletters available? Could *The APL Perspective* from Texas - perhaps the largest, and most information-packed, local APL newsletter - be used as a basic newsletter by smaller APL groups who don't want to publish their own?

Attended by some sixteen newsletter editors and contributors, this first-ever Editors' BOF tackled some of these hefty questions. In this noisy channel, at least - as in Shannon and Weaver's theory of communications - redundancy was considered highly desirable.

There is plenty for the newsletter editors' group to do over the coming year. The individual editors intend to operate a newsletter exchange, and to circulate details of local meetings dates, topics, and speakers. At future Toronto APL meetings, we hope to make available display copies of some of the newsletters mentioned here.

Sept. meeting *continued from page 1*

Popular too were the software exchange, the nine tutorials, the posters, and the birds-of-a-feather (BOF) sessions. Indeed, for **Richard Levine**, the action was everywhere apart from the official paper sessions.

Many of these moments were captured on video (see *APL93 Videotapes* on page 1). Others are included in the APL93 photograph album. This collection of APL93 memorabilia was put together by Larry Moore from photos taken at the conference by **Richard Procter**, Volunteer Coordinator, and **Albert Chan**, student volunteer.

The feedback from the vendors was generally good, and the vendors' exhibits and forums and reception were important parts of the conference. But **David Crossley** of JAD Software remarked on the difficulties of being a less well-known vendor located away from the main thoroughfares. Sadly, vendors and organizers seldom have enough time to attend the formal parts of the conference.

And what was missing? Control structures - we've been talking about them for only fifteen years. New books on APL, J, or K. New users of APL. Formal reports on BOF sessions. Guidelines on how to lead BOF sessions.

Finally, the evening was rounded out by showing videotapes of two of the more popular presentations: *Undocumented Features of APL* by **Timo Laurmaa** and the *JVOX* paper by **David Smith** and **Joey Tuttle**.

Two announcements were made at the meeting. The executive decided that membership would include a copy of the Toronto Toolkit. In addition, **Richard Levine** offered to make copies of the APL93 Software Exchange offerings for anyone who requested it. In return for eleven blank floppies, which you can give to Richard at any meeting, he will return ten floppies containing the software at the next meeting.

Calendar of Events

Local

November 10

User Interface, Media and Integration. Presentation by Darryl Williams, Alexandra Bal, West Suhanic. Sponsored by Toronto Regional chapter of ACM SIGCHI (ToRCHI). Time: 7:00-9:30pm. Location: Rogers Communications Centre, Ryerson Polytechnic University. Free to ToRCHI members, otherwise $3 at the door.

November 25-26

The User-Interface Design Process. Two-day course given by Professor Marilyn Mantei of the Dynamic Graphics Group, Department of Computer Science, University of Toronto. Sponsored by the Information Technology Research Centre (ITRC). Location: Four Seasons-Inn on the Park. Fee: $250.00; $175 for ITRC affiliates, ToRCHI members. Cheques payable to ITRC. Contact: Rosanna Reid, ITRC, Pratt Building, Room 286, University of Toronto, Toronto, Ontario M5S 1A1. Tel: (416) 978-8558, fax: (416) 978-7207. E-mail: rosanna@itrchq.trc.on.ca

International

March 6-8, 1994

1994 Symposium on Applied Computing (SAC'94). Phoenix, Arizona. APL Track Chair: Christopher H. Lee, Manugistics, Inc., 2115 East Jefferson St., Rockville, MD 20852-4999. Tel. 301-984-5117; fax: 301-984-5094. E-mail: 71542.606 @compuserve.com.

July 18-22, 1994

APL in Business. Swansea, Wales. Deadline for contributions: **November 26, 1993**. The conference will examine the inter-related themes of finance, operational research, and statistics working together with APL to enable more effective management. Contact: Mr. J. Haydn Williams, European Business Management School, University College, Singleton Park, Swansea SA2 8PP, Wales, U.K. Tel. +44 792-295555; fax: +44 792-295626.

September 11-15, 1994

APL94. Government House, Antwerp, Belgium. Theme: APL and its applications. Contact: Alain Delmotte, APL94 Program Chair, Avenue du Marathon 6, B-1348 Louvain-la-Neuve, Belgium. Tel: +32-10-450354. E-mail: apl94pgm@ires.ucl.ac.be

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Application for Membership - 1993/1994
Toronto ACM *APL* Special Interest Group

Please support your SIG and ensure you receive the newsletters by joining. Please complete this form and present it with payment to Eric Granz (Membership Secretary) at any *APL* SIG meeting, or by mail to:

Toronto APL Special Interest Group, P.O. Box 384, Adelaide Street Post Office, Toronto, Ontario, M5C 2J5.

Name: _____

Home address: _____

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Home Telephone: ( ) - Office Telephone: ( ) -

E-mail:

Title/Position: _____ Employer: _____

Work address: _____

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_____

Preferred mailing address: ❑ home ❑ office

Method of payment: ❑ cash (do not mail cash) ❑ cheque enclosed ❑ please invoice my employer

To assist the Executive Committee in planning the coming year, it would be appreciated if you would offer your suggestions and help below.

Topics of Interest

I am interested in hearing presentations on the following topics:

APL: _____

Non-APL: _____

Speaker Interest

I am prepared to talk or present a paper at a regular meeting on the following topics:

_____

_____

Meeting Facilities

Preferred locations (check all that apply):

❑ Downtown
❑ Yonge & Bloor
❑ University of Toronto

I can make available a meeting room for the *APL* SIG: ❑ yes ❑ no

APL Skills Database - Toronto APL SIG - 1993/94

The Toronto APL Special Interest Group maintains a database of members with APL skills. The purpose of the database is to assist companies and employers in finding employment candidates with APL skills. As a regular contributor to the database, you will be notified of any permanent or contract positions that employers put forward to the Toronto APL SIG for which APL skills are required.

All contributors to the database must be Toronto APL SIG members in good standing. Please provide below any information that you feel is relevant in helping the SIG to assess whether a particular employment position that is forwarded is relevant to your skills and your availability. This information will be used to help us determine which candidates would likely not be interested in a particular position and therefore reduce our workload and mailing costs.

Name: _____

Mailing address: _____
_____
_____
_____

Telephone: ( ) - (Daytime)
( ) - (Evening/weekends)

Fax: ( ) -

E-mail:

Desired employment (circle one): Contract Permanent Both

Availability - list any time frames for which you are not available:

Geography - specify locations where you are or are not willing to work:

APL skills (optional) - please list years of APL experience, familiarity with types of APL, applications, etc.:

Other information, ie. anything else we should know, what types of positions are of interest to you, etc.:

Please return the completed form to:

Toronto APL Special Interest Group
P.O. Box 384
Adelaide Street Post Office
Toronto, Ontario, M5C 2J5.